

Remarks & Arguments

In the Office Action, the Examiner noted that Claims 32-56 are pending in the application, and that Claims 32-56 are rejected. By this amendment, Claims 32, 34, 40 and 46 have been amended and Claims 37-39 and 54-56 have been canceled without prejudice. Thus, Claims 32-36 and 40-53 are pending in the application. The amendments herein do not add new matter to the application.

Rejections Under 35 USC 102 and 103

Claims 32-35 stand rejected under 35 USC 102 as being anticipated by Hshieh (US Patent No. 6,262,453). Claim 32 has been amended to include the limitations "...wherein a thickness of said second insulative layer is in the range of approximate 0.1 to 0.3 μm , wherein said second insulative layer is not formed by oxidizing said first drain region and wherein said second insulative layer does not introduce substantial stress in said first drain region."

Applicants respectfully assert that Hshieh does not teach or suggest the limitations added by the current amendment to Claim 32. Furthermore, Applicants assert that the product by process limitation "wherein said second insulative layer is not formed by oxidizing said first drain region" does patentably distinguish the claimed structure from that taught by Hshieh. Hshieh teaches that the thick second insulative layer is formed by oxidizing the first drain region. It is appreciated that a thick (e.g., 0.1 to 0.3 μm) oxidation formed second insulative layer introduces stress in the drain region. Thus, the product by process limitation "wherein said second insulative layer is not formed by oxidizing said first drain region" does patentably distinguish the

claimed structure from that taught by Hshieh in that the second insulative layer having a thickness “in the range of approximately 0.1 to 0.3 μ m” results in a first drain region that is not stressed by the second insulative layer. Accordingly, Claim 32 as amended is patentably distinguishable over Hshieh.

Claims 33-36 are dependent upon Claim 32 and incorporate all the limitations therein. Therefore, Claims 33-36 are also patentable over Hshieh for the same reasons advanced in support of Claim 32.

Claims 40-53 stand rejected under 35 USC 103(a) as being obvious in view of Hshieh. Claim 40 has been amended to include the limitations “...wherein a thickness of said insulative layer is in the range of approximate 0.1 to 0.3 μ m and wherein said insulative layer does not introduce substantial stress in said second portion of said first drain region.” Applicants respectfully assert that Hshieh does not disclose the limitations added by the current amendment to Claim 40. Furthermore, Applicants assert that Hshieh discloses that the thick insulative layer is formed by oxidizing the first drain region. It is appreciated that a thick (e.g., 0.1 to 0.3 μ m) oxidation formed insulative layer introduces stress in the drain region. However, a thick (e.g., 0.1 to 0.3 μ m) insulative layer, selected from the group of material consisting of phosphosilicate glass and borophosphosilicate, provides the unexpected benefit that the first drain region is not stressed by the insulative layer. Accordingly, Claim 40 as amended is patentably distinguishable over Hshieh.

Claims 41-45 are dependent upon Claim 40 and incorporate all the limitations therein. Therefore, Claims 41-45 are also patentable over Hshieh for the same reasons advanced in support of Claim 40.

Claim 46 has been amended to include the limitations "...wherein a thickness of said insulative layer is in the range of approximately 0.1 to 0.3 μ m and wherein said insulative layer does not introduce substantial stress in said first drain region." Applicants respectfully assert that Hshieh does not disclose the limitations added by the current amendment to Claim 46. Furthermore, Applicants assert that Hshieh discloses that the thick insulative layer is formed by oxidizing the first drain region. It is appreciated that a thick (e.g., 0.1 to 0.3 μ m) oxidation formed insulative layer introduces stress in the drain region. However, a thick (e.g., 0.1 to 0.3 μ m) insulative layer, selected from the group of material consisting of phosphosilicate glass and borophosphosilicate, provides the unexpected benefit that the first drain region is not stressed by the insulative layer. Accordingly, Claim 46 as amended is patentably distinguishable over Hshieh.

Claims 47-53 are dependent upon Claim 46 and incorporate all the limitations therein. Therefore, Claims 47-53 are also patentable over Hshieh for the same reasons advanced in support of Claim 46.

Appl. No. 09/927,320
Amdt. Dated September 3, 2004
Reply to Office Action of May 5, 2004

Conclusion

For all the reasons advanced above, Applicants respectfully submit that the present application is in condition for allowance and that action is earnestly solicited. The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

The Commissioner is hereby authorized to charge any additional fees, which may be required for this amendment, or credit any overpayment, to Deposit Account 23-0085. In the event that an extension of time is required, or may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account 23-0085.

Respectfully submitted,
WAGNER, MURABITO & HAO, LLP

Dated: September 3, 2004


Eric J. Gash
Registration No. 46,274
Tel.: (408) 938-9060